

### **REMARKS/ARGUMENTS**

Claims 1-11 stand in the present application. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

In the final Office Action, the Examiner has rejected all of claims 1-11 as being anticipated by Hill. Applicants respectfully traverse the Examiner's § 102 rejection of the claims.

In rejecting all claims as anticipated, the Office Action misconstrues the teachings of cited Hill reference. More particularly, the Office Action asserts that Hill at page 9 lines 18-22 and lines 23-29 discloses, respectively, "that the number of requests relating to each member of member of the set or set of points is no greater than a predetermined number frame number" and "generating an allocation plan by reducing the number of queue requests relating to each one or both sets of ports by a common value." See Office Action at page 3.

The third step of the method of the present invention is to compare the summations for each output port with  $f$ , which is the maximum number of cells that can be sent from each input port and to each output port in each frame. If any row or column of the request matrix exceeds  $f$ , the number of requests must be reduced to no more than  $f$ . One method of achieving this is to reduce the number of allowed requests to a number proportional to the actual number of requests, i.e.

$$r'_{i,j} = \frac{f}{\sum r_{i,j}} \cdot r_{i,j}$$

This step is efficient when there is a heavy concentration of requests on one, or a few, input or output ports.

See, Hill at page 9, lines 18-29 (emphasis supplied).

However, this assertion misconstrues the cited Hill passage, and takes it out of the context of the specification as a whole and the claims in particular. The underlined portions of the cited passage above clearly indicate that Hill, unlike the present application and claims, teaches that the number of requests is reduced for those input-output pairs for which the total number of requests is greater than the maximum request capacity of the ports. In the described embodiment this reduction is quantified by the proportion by which each reduction is made being  $f/\text{SUM}(r)$ . See Hill at page 9, lines 22-27. This is clearly established both in the Hill claims and on page 9, lines 20-22 where it is clear that this reduction is only made for the request queues for those ports for which the total number of requests exceeds the capacity of that port. Note in particular, Hill claim 1 step "e" – "reducing the number of requests for those input-output pairs where the total number of requests is greater than the maximum request capacity", and page 9, lines 20-22, "If any row or column of the request matrix exceeds  $f$ , the number of requests must be reduced to no more than  $f$ ". There is no suggestion of reducing all the queues by such a factor; only those which exceed " $f$ ."

To the contrary, the present claims require the number of requests relating to each set of ports to be reduced by a common value. Thus all the queues are reduced, whether or not they originally exceeded the frame value. Note also page 11, lines 18-25 of the present specification, which specifies that every value in the request matrix is

reduced. See, also, the generation of the matrix on page 12 lines 1-4. Hill simply does not teach (or even suggest) this limitation of the present claims.

It is further respectfully submitted that there is nothing in Hill to even suggest that this limitation of the present claims. Indeed, it is counter-intuitive to reduce the lengths of those queues which are not over-length. Applicant has found that this approach is more efficient than reducing only those queues which are over-length and, as described in the present specification, with reference to Figure 2, at page 17 lines 4-8, there is nothing in the prior art to suggest this.

Typically a second process is used to fill the remaining available slots, and the present invention provides more of these extra slots since all queues, not just the largest, have been reduced in the first stage. The prior art, by not reducing the shorter queues, effectively gives them priority over the longer ones, which is likely to lead to greater delay as the longer queues increase further and with more discarded packets, as shown in Figure 2.

Accordingly, claims 1-11 are believed to patentably define over the cited reference for the reasons given above.

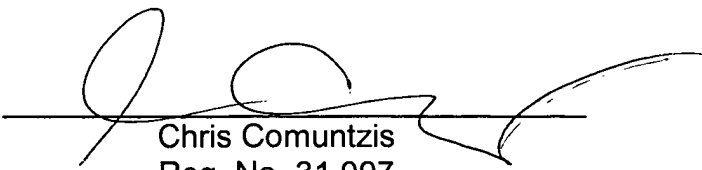
Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 1-11, standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

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Respectfully submitted,

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